

CALIFORNIA'S PATH TO

ENERGY SECURITY

THE IMPORTANCE OF NATURAL GAS

California requires a lot of energy to meet the needs of its 40 million residents. Fortunately, we have a vast amount of energy available in the state, including:

Traditional Sources

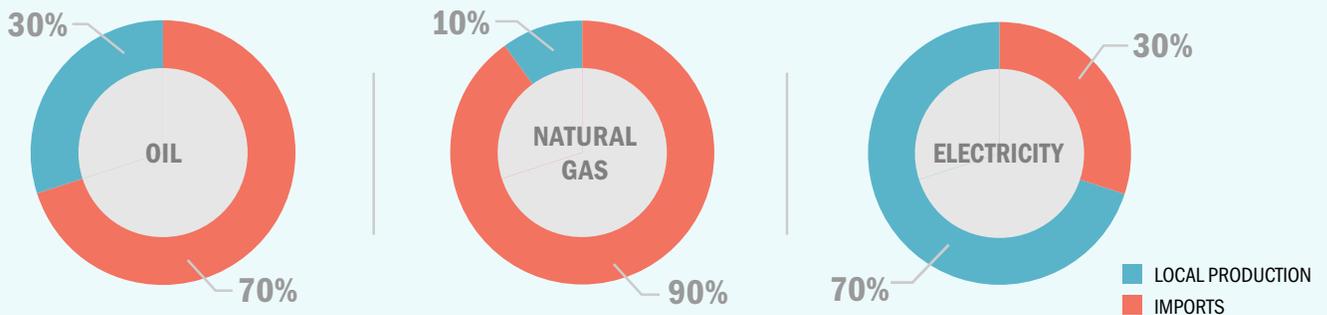


and

Renewable Sources



Even with ample local resources available to us, state energy policies have made Californians dependent on energy imports. For example, we import more than 70% of our oil, 90% of our natural gas and 30% of our electricity from other states and countries every year to meet our energy needs.



To help Californians achieve a secure energy future, it is crucial we embrace a diverse energy mix that is **affordable, reliable** and **sustainable**. Although some policymakers and activists are pushing a regressive (and expensive!) energy agenda, California's working families need an **"All-of-the-Above"** energy supply to meet our needs in the most sustainable way possible.

According to a new report*, California cannot achieve energy resiliency from renewable energy sources alone – **we need the support, affordability and stability** made possible only by traditional sources of energy such as natural gas.

*Report "Assessing Alternatives to Diesel Backup Power," from The Brattle Group and sponsored by Enchanted Rock, June 2020

NATURAL GAS IS ESSENTIAL TO CALIFORNIA'S ENERGY SECURITY

1

NATURAL GAS HAS A SMALL LAND FOOTPRINT

Compared to natural gas, solar and batteries require significantly more land.



Natural Gas = **12** sq. miles

of land needed for facilities to power California using natural gas. (Source: strata.org)

Solar = **944** sq. miles

of land needed to power California using solar power, almost **2 times the size of Los Angeles!** (Source: energy.ca.gov)



2

NATURAL GAS IS AFFORDABLE



Electricity rates are always increasing

California families already pay about **50% more** for electricity than the rest of the nation under existing renewable mandates.

(Source: California Center for Jobs and the Economy)



California is mandating that new homes have solar panels installed during construction

This will increase the price of every new home by **\$8,000 to \$20,000**. (Source: Institute for Energy Research)



Solar mandates have increased the cost of electricity and housing

In 2017, Californians faced a **22% increase in electricity rates** in conjunction with a 23% increase in solar.

(Source: U.S. EIA Electricity Data Browser)

840,000 Americans are pushed below the poverty line for every **10% increase in home energy costs**.

(Source: California Center for Jobs and the Economy)

3

NATURAL GAS HAS LED TO LOWER U.S. GHG EMISSIONS



Since 2005, there have been **more U.S. greenhouse gas (GHG) reductions from natural gas** than all renewables combined. (Source: Energy in Depth)



Natural gas has **reduced emissions 11 times more** than solar energy and 50% more than wind in the U.S. (Source: Carbon Brief)

4

NATURAL GAS IS AN EFFICIENT SOURCE OF ENERGY



Conventional natural gas power plants have an **80-90% capacity factor**, the percentage of maximum possible output actually produced by a plant. Solar has a capacity factor of only 10-25% and wind is 30-40%. (Source: The Electricity Journal)

Natural gas provides the reliable energy Californians need even when the sun isn't shining and the wind isn't blowing.



Natural gas appliances are far more efficient than electric appliances. An **electric range uses 3 times as much energy** as natural gas to produce and deliver the same heat. (Source: Think Energy)

In addition, a gas stove will cost you **less than half** as much to operate. (Source: California Energy Commission)

Energy Diversity Increases California's Energy Security

California is home to a growing population and unique ecosystems. Natural gas is instrumental to providing working families and communities with the reliable, affordable energy supply we need every day to power our lives, while also reducing GHG emissions and preserving precious environmental habitat. Natural gas helps ensure a diverse, resilient and sustainable energy supply that best meets Californians' needs for the long term.



Learn more at crc.com and poweringcalifornia.com